



# Launch Mission Execution Forecast

**Mission:** Falcon 9 Starlink 4-18

**Issued:** 16 May 2022 / 0800L (1200Z)

**Valid:** 18 May 2022 / 0610 – 0710L (1010 – 1110Z)



**Forecast Discussion:** No significant changes to the forecast as the high pressure area over the Atlantic Ocean has started to retreat east. In addition, the northern portions of a frontal system are pushing off the Eastern Seaboard today, as the front's tail moves over the Florida Panhandle. Southerly winds will keep the temperatures elevated in Central Florida and allow daily sea breeze interactions to produce isolated showers and thunderstorms each afternoon and evening. On Tuesday and Wednesday, the remnants of the boundary will stall mostly north of the Space Coast, but add ingredients to enhance the shower and thunderstorm coverage and intensity. The primary weather concerns for Wednesday morning are the Cumulus and Anvil Cloud Rules associated with lingering convection along the boundary.

High pressure will begin to build back into the area on Wednesday and Thursday, returning Central Florida to the daily cycle of sea breeze interaction. The primary weather concern for Thursday morning is the Cumulus Cloud Rule.

Launch Day	Probability of Violating Weather Constraints <sup>1</sup>						
	20%	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rule					
	Weather Conditions					Additional Risk Criteria <sup>2</sup>	
	Weather/Visibility: None / 7 mi.	Clouds		Type	Coverage	Base (ft)	Tops (ft)
Temp/Humidity: 72°F / 90%	Cumulus	Few	3,000	10,000	Booster Recovery Weather: Low		
Liftoff Winds (200’): 240° 8 - 12 mph						Solar Activity: Low	
24-Hour Delay	Probability of Violating Weather Constraints						
	10%	Primary Concerns: Cumulus Cloud Rule					
	Weather Conditions					Additional Risk Criteria	
	Weather/Visibility: None / 7 mi.	Clouds		Type	Coverage	Base (ft)	Tops (ft)
Temp/Humidity: 72°F / 90%	Cumulus	Few	3,000	8,000	Booster Recovery Weather: Low		
Liftoff Winds (200’): 220° 8 - 12 mph						Solar Activity: Low	
Notes	1. The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring anytime during the launch window.						
	2. Additional Risk Criteria, which are not included in the PoV, are mission-specific constraints that may not include all phenomena within each risk factor.						
See <a href="https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf">https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf</a> for more information							
Next Forecast Will Be Issued		17 May 2022					